

**CITY OF NEWTON  
PURCHASING DEPARTMENT**

***CONTRACT FOR THE PUBLIC WORKS DEPARTMENT  
(M.G.L. c.30B)***

**PROJECT MANUAL:  
SUPPLY & INSTALL SEWERAGE GRINDER  
AT THE ELLIOT STREET PUMP STATION  
*INVITATION FOR BID #14-45***

**Bid Opening Date: October 31, 2013 at 12:00 p.m.**

**OCTOBER 2013  
Setti D. Warren, Mayor**

**CITY OF NEWTON**  
**PURCHASING DEPARTMENT**  
**INVITATION FOR BID**

The City of Newton invites sealed bids from Contractors for

**Supply & Install Sewerage Grinder at the Elliot Street Pump Station**

**Bids** will be received until: **12:00 p.m., Thursday, October 31, 2013**  
at the Purchasing Department, Room 204, Newton City Hall, 1000 Commonwealth Ave., Newton, MA 02459. Immediately following the deadline for bids all bids received within the time specified will be publicly opened and read aloud.

Contract Documents will be available online at the City's website: [www.newtonma.gov/bids](http://www.newtonma.gov/bids) or for pickup at Newton City Hall, Room 204, after **10:00 a.m., October 17, 2013**.

There will be no charge for contract documents.

Once you've downloaded this bid from the internet website ([www.newtonma.gov/bids](http://www.newtonma.gov/bids)) I strongly suggest you email ([purchasing@newtonma.gov](mailto:purchasing@newtonma.gov)) your company's Name, address, EMAIL, phone, fax AND the INVITATION FOR BID NUMBER and Project Title, so that we may add you to the Bidders' List and you will be notified of any/all addendums.

All bids are subject to the provisions of M.G.L. c.30B.

Bid surety is not required with this bid.

**Anticipated start date is January 1, 2014. Time for completion is one hundred twenty (120) days.** Time is of the essence in the performance of the work of this contract. Bidders attention is directed to the time for completion stated in the Project Manual and the provisions regarding the assesment of liquidated damages for failure to complete the work within the time specified.

The work under this contract shall consist of removing and replacing an existing sewerage grinder at the Elliot Street Pump Station, Newton, MA and all appurtenances as specified.

All bids shall be submitted as one ORIGINAL and one COPY.

It is Bidder's responsibility to ensure its bid is submitted by the deadline for acceptance. Any bid received after the time for receipt established in this Invitation will be returned unopened.

All City of Newton bids are available on the City's web site, [www.newtonma.gov/bids](http://www.newtonma.gov/bids), Invitations for Bid. It is the sole responsibility of the contractor downloading these bids to ensure they have received any and all addenda prior to the bid opening. Addenda's will be available online within the original bid document as well as a separate file. If you download bids from the internet site and would like to make it known that your company has done so, you may fax the Purchasing Department (617) 796-1227 or email [purchasing@newtonma.gov](mailto:purchasing@newtonma.gov) with your NAME, ADDRESS, PHONE, FAX AND INVITATION FOR BID NUMBER.

Award shall be made to lowest responsive and responsible bidder.

The City will reject any and all bids in accordance with the above referenced General Laws. In addition, the City reserves the right to waive minor informalities in any or all bids, or to reject any or all bids (in whole or in part) if it be in the public interest to do so.

CITY OF NEWTON

Nicholas Read  
*Chief Procurement Officer*

October 17, 2013

**CITY OF NEWTON**  
**DEPARTMENT OF PURCHASING**  
**INSTRUCTIONS TO BIDDERS**

**ARTICLE 1 - BIDDER'S REPRESENTATION**

- 1.1 Each General Bidder (hereinafter called the "Bidder") by making a bid (hereinafter called "bid") represents that:
1. The Bidder has read and understands the Bidding Documents, Contract Forms, General Conditions, Conditions of the Contract, General Requirements and Project Specifications (collectively, referred to as the "Contract Documents") and the bid is made in accordance therewith.
  2. The Bidder has visited the work site and is familiar with the local conditions under which the work has to be performed.
- 1.2 Failure to so examine the Contract Documents and work site will not relieve any Bidder from any obligation under the bid as submitted.

**ARTICLE 2 - REQUEST FOR INTERPRETATION**

- 2.1 Bidders shall promptly notify the City of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents, the site, and local conditions.
- 2.2 Bidders requiring clarification or interpretation of the Contract Documents shall make a written request to the *Chief Procurement Officer*, at [purchasing@newtonma.gov](mailto:purchasing@newtonma.gov) or via facsimile (617) 796-1227. The City will only answer such requests if received by Friday, **October 25, 2013 at 12:00 noon**.
- 2.3 Interpretation, correction, or change in the Contract Documents will be made by addendum which will become part of the Contract Documents. The City will not be held accountable for any oral communication.
- 2.4 Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents.
- 2.5 Copies of addenda will be made available for inspection at the location listed in the Invitation for Bids where Contract Documents are on file, in addition to being available online at [www.newtonma.gov/bids](http://www.newtonma.gov/bids).
- 2.6 Bidders or proposers contacting ANY CITY EMPLOYEE regarding an Invitation for Bid (IFB) or a Request for Proposal (RFP), outside of the Purchasing Department, once an IFB or RFP has been released, may be disqualified from the procurement process.
- 2.7 Bidders downloading information off the internet web site are solely responsible for obtaining any addenda prior to the bid opening. If the bidder makes itself known to the Purchasing Department, at [purchasing@newtonma.gov](mailto:purchasing@newtonma.gov) or via facsimile (617) 796-1227, it shall be placed on the bidder's list. Bidders must provide the Purchasing Department with their company's name, street address, city, state, zip, phone, fax, email address and **INVITATION FOR BID #14-45**.

**ARTICLE 3 - MBE PARTICIPATION**

- 3.1 Notice is hereby given that the Mayor's Affirmative Action Plan for the City of Newton in effect at the time of this solicitation is applicable to all construction contracts in excess of \$10,000.00.
- 3.2 Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan and the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program in effect at the time of this solicitation are applicable to all City contracts for goods and services in excess of \$50,000.00.
- 3.3 Copies of the Plans and Program referred to in Sections 3.1 and 3.2 are available at: [www.newtonma.gov/purchasing](http://www.newtonma.gov/purchasing).

#### ARTICLE 4 - PREPARATION AND SUBMISSION OF BIDS

- 4.1 Bids shall be submitted on the "Bid Form" as appropriate, furnished by the City.
- 4.2 All entries on the Bid Form shall be made by typewriter or in ink.
- 4.3 Where so indicated on the Bid Form, sums shall be expressed in both words and figures. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.
- 4.4 The Bid, including the bid deposit shall be enclosed in a sealed envelope with the following plainly marked on the outside:
- \* GENERAL BID FOR: **#14-45**
  - \* NAME OF PROJECT: **Supply & Install Sewerage Grinder at the Elliot Street Pump Station**
  - \* BIDDER'S NAME, BUSINESS ADDRESS, AND PHONE NUMBER
- 4.5 Date and time for receipt of bids is set forth in the Invitation for Bids.
- 4.6 Timely delivery of a bid at the location designated shall be the full responsibility of the Bidder. In the event that Newton City Hall is closed on the date or at the time that bids are due, the date and time for receipt of bids shall be on the next business day following that the Newton City Hall and the Purchasing Department are open.
- 4.7 Bids shall be submitted with one **original** and one **copy**.
- 4.8 Be advised that a new Massachusetts law has been enacted that required all employees who work on Massachusetts public works construction sites must have no less than 10 hours of OSHA-approved safety and health training. See Chapter 306 of the Acts of 2004, which became effective July 1, 2006.
1. This requirement will apply to any general bid or sub bid submitted.
  2. This law directs the Massachusetts Attorney General to restrain the award of construction contracts to any contractor who is in violation to this requirement and to restrain the performance of these contracts by non-complying contractors.
  3. The contractor and all subcontractors on this project will be required to provide certification of compliance with this requirement. Non-compliance with this law will disqualify you from bidding on public contracts.

#### ARTICLE 5 - ALTERNATES

- 5.1 Each Bidder shall acknowledge alternates (if any) in Section C on the Bid Form.
- 5.2 In the event an alternate does not involve a change in the amount of the base bid, the Bidder shall so indicated by writing "No Change", or "N/C" or "0" in the space provided for that alternate.
- 5.3 Bidders shall enter on the Bid Form a single amount for each alternate which shall consist of the amount for work performed by the Contractor.
- 5.4 The low Bidder will be determined on the basis of the sum of the base bid and the accepted alternates.

#### ARTICLE 6 - WITHDRAWAL OF BIDS

- 6.1 Any bid may be withdrawn prior to the time designated for receipt of bids on written or electronic request. Electronic withdrawal of bids must be confirmed over the Bidder's signature by written notice postmarked on or before the date and time set for receipt of bids.
- 6.2 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.
- 6.3 No bids may be withdrawn within sixty (60) days, Saturdays, Sundays and legal holidays excluded, after the opening of the bids.

## ARTICLE 7 - CONTRACT AWARD

- 7.1 The City will award the contract to the lowest responsible and eligible Bidder within sixty (60) days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.
- 7.2 The City reserves the right to waive minor informalities in or to reject any or all Bids if it be in the public interest to do so.
- 7.3 The City reserves the right to reject any bidder who has failed to pay any local taxes, fees, assessments, betterments, or any other municipal charge, unless the bidder has a pending abatement application or has entered into a payment agreement with the collector-treasurer.
- 7.4 As used herein, the term "lowest responsible and eligible Bidder" shall mean the Bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who has met all the requirements of the invitation for bids; (3) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (4) who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder.
- 7.5 Subsequent to the award and within five (5) days, Saturday, Sundays and legal holidays excluded, after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the City a contract in the form included in the Contract Documents in such number of counterparts as the City may require.
- 7.6 In the event that the City receives low bids in identical amount from two or more responsive and responsible Bidders, the City shall select the successful Bidder by a blind selection process chosen by the City such as flipping a coin or drawing names from a hat. The low Bidders who are under consideration will be invited to attend and observe the selection process.

## ARTICLE 8 - TAXES

- 8.1 The Bidder shall not include in this bid any tax imposed upon the sale or rental of tangible personal property in this Commonwealth, such as any and all building materials, supplies, services and equipment required to complete the work.
- 8.2 The City is exempt from payment of the Massachusetts Sales Tax, and the Bidder shall not include any sales tax on its bid. The City's exemption Number is E-046-001-404.

**END OF SECTION**

**CITY OF NEWTON**  
**DEPARTMENT OF PURCHASING**  
**GENERAL BID FORM #14-45**

**TO THE AWARDING AUTHORITY:**

**A.** The undersigned proposes to furnish all labor and materials required for

**Supply & Install Sewerage Grinder at the Elliot Street Pump Station**

in Newton, Massachusetts in accordance with the accompanying plans and specifications prepared by the City of Newton for the contract price specified below, subject to additions and deductions according to the terms of the specifications.

**B.** This bid includes addenda number(s) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

**C.** The total proposed contract price for items on the Item Sheet is:

\_\_\_\_\_  
DOLLARS (\$ \_\_\_\_\_)

COMPANY: \_\_\_\_\_

**D.** The undersigned has completed and submits herewith the following documents:

- ☐ Signed Bid Form, 2 pages
- ☐ Bidder's Qualifications and References Form , 2 pages
- ☐ Certificate of Non-Collusion, 1 page
- ☐ Debarment Letter, 1 page
- ☐ IRS Form W-9, 1 page

**E.** Prompt Payment Discounts. Bidders are encouraged to offer discounts in exchange for an expedited payment. Payments may be issued earlier than the general goal of within 30 days of receipt of the invoice only when in exchange for discounted prices. Discounts will not be considered in determining the lowest responsible bidder.

Prompt Payment Discount \_\_\_\_\_% \_\_\_\_\_ Days  
Prompt Payment Discount \_\_\_\_\_% \_\_\_\_\_ Days  
Prompt Payment Discount \_\_\_\_\_% \_\_\_\_\_ Days

- F. The undersigned agrees that, if s/he is selected as general contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this bid and furnish a labor and materials or payment bond, each of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority and each in the sum of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price.

The undersigned hereby certifies that s/he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that s/he will comply fully with all laws and regulations applicable to awards made subject to section forty-four A of M.G.L. Chapter 30, s 39M.

The undersigned certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (2) that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration ("OSHA") that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and (3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States OSHA that is at least 10 hours in duration. The undersigned understands that any employee found on a worksite subject to this section without documentation of successful completion of a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration shall be subject to immediate removal.

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date \_\_\_\_\_

\_\_\_\_\_  
(Name of General Bidder)

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed Name and Title of Signatory)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(City, State Zip)

\_\_\_\_\_  
(Telephone)

\_\_\_\_\_  
(FAX)

\_\_\_\_\_  
(E-mail)

**NOTE:** If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; and if an individual, give residential address if different from business address.

**END OF SECTION**

## CITY OF NEWTON

### BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the City of Newton for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

1. FIRM NAME: \_\_\_\_\_
2. WHEN ORGANIZED: \_\_\_\_\_
3. INCORPORATED? \_\_\_\_\_ YES \_\_\_\_\_ NO DATE AND STATE OF INCORPORATION: \_\_\_\_\_
4. IS YOUR BUSINESS A **MBE**? \_\_\_\_\_ YES \_\_\_\_\_ NO **WBE**? \_\_\_\_\_ YES \_\_\_\_\_ NO or **MWBE**? \_\_\_\_\_ YES \_\_\_\_\_ NO
- \* 5. LIST ALL CONTRACTS CURRENTLY ON HAND, SHOWING CONTRACT AMOUNT AND ANTICIPATED DATE OF COMPLETION:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- \* 6. HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU?  
\_\_\_\_\_ YES \_\_\_\_\_ NO  
IF YES, WHERE AND WHY?  
\_\_\_\_\_  
\_\_\_\_\_
- \* 7. HAVE YOU EVER DEFAULTED ON A CONTRACT? \_\_\_\_\_ YES \_\_\_\_\_ NO  
IF YES, PROVIDE DETAILS.  
\_\_\_\_\_  
\_\_\_\_\_
- \* 8. LIST YOUR VEHICLES/EQUIPMENT AVAILABLE FOR THIS CONTRACT:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- \* 9. IN THE SPACES FOLLOWING, PROVIDE INFORMATION REGARDING CONTRACTS COMPLETED BY YOUR FIRM SIMILAR IN NATURE TO THE PROJECT BEING BID. A MINIMUM OF FOUR (4) CONTRACTS SHALL BE LISTED. PUBLICLY BID CONTRACTS ARE PREFERRED, BUT NOT MANDATORY.  
  
PROJECT NAME: \_\_\_\_\_  
OWNER: \_\_\_\_\_  
CITY/STATE: \_\_\_\_\_

DOLLAR AMOUNT: \$ \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_  
PUBLICLY BID? \_\_\_\_\_ YES \_\_\_\_\_ NO  
TYPE OF WORK?: \_\_\_\_\_  
CONTACT PERSON: \_\_\_\_\_ TELEPHONE #: (\_\_\_\_) \_\_\_\_\_  
CONTACT PERSON'S RELATION TO PROJECT?: \_\_\_\_\_  
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: \_\_\_\_\_  
OWNER: \_\_\_\_\_  
CITY/STATE: \_\_\_\_\_  
DOLLAR AMOUNT: \$ \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_  
PUBLICLY BID? \_\_\_\_\_ YES \_\_\_\_\_ NO  
TYPE OF WORK?: \_\_\_\_\_  
CONTACT PERSON: \_\_\_\_\_ TELEPHONE #: (\_\_\_\_) \_\_\_\_\_  
CONTACT PERSON'S RELATION TO PROJECT?: \_\_\_\_\_  
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: \_\_\_\_\_  
OWNER: \_\_\_\_\_  
CITY/STATE: \_\_\_\_\_  
DOLLAR AMOUNT: \$ \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_  
PUBLICLY BID? \_\_\_\_\_ YES \_\_\_\_\_ NO  
TYPE OF WORK?: \_\_\_\_\_  
CONTACT PERSON: \_\_\_\_\_ TELEPHONE #: (\_\_\_\_) \_\_\_\_\_  
CONTACT PERSON'S RELATION TO PROJECT?: \_\_\_\_\_  
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: \_\_\_\_\_  
OWNER: \_\_\_\_\_  
CITY/STATE: \_\_\_\_\_  
DOLLAR AMOUNT: \$ \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_  
PUBLICLY BID? \_\_\_\_\_ YES \_\_\_\_\_ NO  
TYPE OF WORK?: \_\_\_\_\_  
CONTACT PERSON: \_\_\_\_\_ TELEPHONE #: (\_\_\_\_) \_\_\_\_\_  
CONTACT PERSON'S RELATION TO PROJECT?: \_\_\_\_\_  
(i.e., contract manager, purchasing agent, etc.)

10. The undersigned certifies that the information contained herein is complete and accurate and hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the City of Newton in verification of the recitals comprising this statement of Bidder's qualifications and experience.

DATE: \_\_\_\_\_ BIDDER: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

**END OF SECTION**

## **CERTIFICATE OF NON-COLLUSION**

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee club, or other organization, entity, or group or individuals.

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(Signature of individual)

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Name of Business



**Request for Taxpayer  
Identification Number and Certification**

Give form to the  
requester. Do not  
send to the IRS.

Print or type  
See Specific Instructions on page 2.

Name (as shown on your income tax return)	
Business name, if different from above	
Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ ..... <input type="checkbox"/> Other (see instructions) ▶	<input checked="" type="checkbox"/> Exempt payee
Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
City, state, and ZIP code	
List account number(s) here (optional)	

**Part I Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
or
Employer identification number

**Part II Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶	Name
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**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

**Purpose of Form**

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

## **CONTRACT FORMS**

The awarded bidder will be required to complete and submit documents substantially similar in form to the following.

These forms may need to be modified on account of changed circumstances, and are provided for informational purposes only.

# CITY-CONTRACTOR AGREEMENT

## CONTRACT NO. C-

THIS AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_ in the year Two Thousand and Thirteen by and between the CITY OF NEWTON, a municipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, hereinafter referred to as the CITY, acting through its Chief Procurement Officer, but without personal liability to him, and

hereinafter referred to as the CONTRACTOR.

The parties hereto for the consideration hereinafter set forth agree as follows:

**ARTICLE 1. STATEMENT OF WORK.** The Contractor shall furnish all labor, materials, and equipment and perform all work required in strict accordance with the Contract Documents for the following project:

### **Supply & Install Sewerage Grinder at the Elliot Street Pump Station**

**ARTICLE 2. TIME OF COMPLETION.** Anticipated start date is January 1, 2014. Time for completion is One Hundred Twenty (120) days. Time is of the essence in the performance of the work of this contract. Bidders attention is directed to the time for completion stated in the Project Manual and the provisions regarding the assesment of liquidated damages for failure to complete the work within the time specified.

**ARTICLE 3. THE CONTRACT PRICE.** The City shall pay the Contractor for the full and satisfactory performance of the Contract, in current funds the sum of:

(\$ \_\_\_\_\_ )

**ARTICLE 4. CONTRACT DOCUMENTS.** The Contract Documents consist of the following documents which are either attached to this Agreement or are incorporated herein by reference:

- a. This CITY-CONTRACTOR Agreement;
- b. The City's Invitation For Bid #14-45 issued by the Purchasing Department;
- c. The Project Manual for **Supply & Install Sewerage Grinder at the Elliot Street Pump Station** including the Instructions to Bidders; General Conditions; Special Conditions; MWBE/AA Requirements, Wage Rate Requirements and Wage Rate Schedule(s) including any updated prevailing wage rate schedules if applicable; The Supplementary Special Conditions; General Requirements and Project Specifications; and Drawings, if included or referenced therein;
- d. Addenda Number(s) \_\_\_\_\_ ;
- e. The Bid Response of the CONTRACTOR submitted for this Project and accompanying documents and certifications;
- f. Certificate(s) of Insurance and surety bond(s) submitted by the CONTRACTOR in connection with this Project;
- g. Duly authorized and executed Amendments, Change Orders or Work Orders issued by the CITY after execution of this CITY-CONTRACTOR Agreement.

This CITY-CONTRACTOR Agreement, together with the other documents enumerated in this Article, constitute the entire Agreement between the CITY and the CONTRACTOR.

**ARTICLE 5. ALTERNATES.** The following Alternates have been accepted and their costs are included in the Contract Price stated in Article 3 of this Agreement:

Alternates:     N/A    

**ARTICLE 6. APPLICABLE STATUTES.** All applicable federal, state and local laws and regulations are incorporated herein by reference and the Contractor agrees to comply with same.

IN WITNESS WHEREOF, the parties have caused this instrument to be executed under seal the day and year first above written.

**CONTRACTOR**

By \_\_\_\_\_

Print Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

*Affix Corporate Seal here*

City funds in the amount of \$90,000.00  
are available in account number:

27A401Y3-586010

I further certify that the Mayor, or his designee,  
is authorized to execute contracts and approve  
change orders.

By \_\_\_\_\_

*Comptroller of Accounts*

Date \_\_\_\_\_

**CITY OF NEWTON**

By \_\_\_\_\_

*Chief Procurement Officer*

Date \_\_\_\_\_

By \_\_\_\_\_

*Commissioner of Public Works*

Date \_\_\_\_\_

Approved as to Legal Form and Character

By \_\_\_\_\_

*Associate City Solicitor*

Date \_\_\_\_\_

**CONTRACT AND BONDS APPROVED**

By \_\_\_\_\_

*Mayor or his designee*

Date \_\_\_\_\_

## CERTIFICATE OF AUTHORITY - CORPORATE

1. I hereby certify that I am the Clerk/Secretary of \_\_\_\_\_  
(insert full name of Corporation)

2. Corporation, and that \_\_\_\_\_  
(insert the name of officer who signed the **contract and bonds.**)

3. is the duly elected \_\_\_\_\_  
(insert the title of the officer in line 2)

4. of said corporation, and that on \_\_\_\_\_  
(insert a date that is ***ON OR BEFORE*** the date the officer signed the **contract and bonds.**)

at a duly authorized meeting of the Board of Directors of said corporation, at which all the directors were present or waived notice, it was voted that

5. \_\_\_\_\_ the \_\_\_\_\_  
(insert **name** from line 2) (insert **title** from line 3)

of this corporation be and hereby is authorized to execute contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.

6. ATTEST: \_\_\_\_\_ *AFFIX CORPORATE  
SEAL HERE*  
(Signature of **Clerk or Secretary**)\*

7. Name: \_\_\_\_\_  
(Please print or type name in line 6)\*

8. Date: \_\_\_\_\_  
(insert a date that is ***ON OR AFTER*** the date the officer signed the **contract and bonds.**)

\* The name and signature inserted in lines 6 & 7 **must** be that of the **Clerk or Secretary** of the corporation.

## CERTIFICATION OF TAX COMPLIANCE

Pursuant to M.G.L. c.62C, §49A and requirements of the City, the undersigned acting on behalf of the Contractor certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth relating to taxes including payment of all local taxes, fees, assessments, betterments and any other local or municipal charges (unless the Contractor has a pending abatement application or has entered into a payment agreement with the entity to which such charges were owed), reporting of employees and contractors, and withholding and remitting child support.\*

\_\_\_\_\_  
\*\*Signature of Individual  
or Corporate Contractor (Mandatory)

\_\_\_\_\_  
\*\*\* Contractor's Social Security Number  
(Voluntary) or Federal Identification Number

Print Name:\_\_\_\_\_

By: \_\_\_\_\_  
Corporate Officer  
(Mandatory, if applicable)

Date: \_\_\_\_\_

Print Name:\_\_\_\_\_

\* The provision in this Certification relating to child support applies only when the Contractor is an individual.

\*\* Approval of a contract or other agreement will not be granted until the City receives a signed copy of this Certification.

\*\*\* Your social security number may be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended.

GENERAL CONDITIONS  
OF THE CONTRACT  
FOR NON-TECHNICAL SERVICES

The City of Newton, herein referred to as the City, does hereby establish the following General Conditions, applicable to this Invitation for Bids and any subsequent purchase order, work order, shipping order or contract resulting therefrom.

1.0 SCOPE OF SERVICES

- 1.1 The Contractor agrees to furnish all labor, materials, equipment and insurance necessary to perform and fully complete, in every respect, within the time frame herein specified, all work (hereinafter referred as the Services) described in the Project Manual.
- 1.2 The Contractor shall not make any changes in the scope of Services without the prior written consent of the City. The Contractor shall make reasonable revisions or corrections, within the scope of Services, to any work performed until submitted in a form acceptable to the City.
- 1.3 The City reserves the right to alter, add to or reduce the Services by delivering to the Contractor written notice specifying the nature and extent of such alteration, addition or reduction. Such notice shall be effective upon the later of actual receipt by the Contractor or upon the date given in such notice. No addition to the Services shall be made unless the City and the Contractor have agreed to such increase in writing.

2.0 CONTRACT TERM

- 2.1 The obligations of the Contractor identified herein shall commence upon execution of the City-Contractor Contract and shall continue in full force and effect for the duration of the contract term as identified in the Project Manual. The contractor shall commence the performance of services under this contract promptly upon receipt of the City's Notice to Proceed in accordance with the provisions identified in the Project Manual.
- 2.2 In the event the term of this contract exceeds a period of one year and notwithstanding any provision to the contrary herein, the City shall cancel this contract in the event that funds are not appropriated or otherwise made available to support continuation of performance by the Contractor in any fiscal year succeeding the first year.

3.0 EXECUTION

- 3.1 All work required hereunder shall be performed as promptly as possible, and in any event within the time herein set forth, and such work shall be subject to approval and acceptance by the City, but such approval and acceptance shall not relieve the Contractor from the obligation to correct any incomplete, inaccurate or defective work, all of which shall be promptly remedied by the Contractor on demand, without cost to the City. The Contractor shall obtain all the required licenses and permits for the work herein described.
- 3.2 The Contractor shall conform to all determinations and directions of the City concerning the Contractor's delivery of services in the event of inclement weather, equipment failure, picket lines on City property, or labor strikes by the contractor's employees.

4.0 COMPENSATION

- 4.1 The City shall pay the Contractor for services rendered under this contract in accordance with the amount(s) set forth in the Contractor's General Bid Form and pursuant to the provisions contained in the Project Manual.
- 4.2 Notwithstanding anything to the contrary contained in the Contract, the City may withhold any payment to the Contractor hereunder if and for so long as the Contractor fails to perform any of its obligations hereunder or otherwise is in default under this Contract including, without limitation, any failure to perform Services in full accordance with the amount sufficient in the reasonable opinion of the City to cure any such default or failure of performance by the Contractor.

4.3 In no event shall the City be required to pay any amounts for work deemed by it to be unacceptable, or which are otherwise disputed. In the event the City disputes any such amounts invoiced, it shall pay all amounts not in dispute and notify the Contractor in writing of the amounts disputed and the reasons therefor.

4.4 No payment made shall constitute or be construed as final acceptance or approval of that part of the Services to which payment relates, or relieve the Contractor of any of its obligations outlined in this Contract. Further, the City shall not be deemed, by virtue of making payments to the Contractor hereunder, to have released the Contractor from any claim or liability, or to have waived any action arising out of the breach of this Contract by the Contractor.

## 5.0 REPORTS AND DRAWINGS

When the Contractor has been paid for the Services performed by him or her, all reports, drawings, and other material furnished to the City shall become the City's property and may be used by the City (or such parties as the City may designate) thereafter in such manner and for such purposes as the City (or such parties as the City may designate) may deem advisable, without further employment of or additional compensation to the Contractor. The Contractor shall not release or disclose any report, drawing, or other material furnished to the Contractor by the City in connection with the performance of the Contractor's Services

## 6.0 CONTRACTOR'S ACCOUNTING RECORDS

The Contractor shall keep records pertaining to Services performed (including complete and detailed time records) on the basis of recognized bookkeeping practices, generally accepted accounting principles, and in accordance with such reasonable requirements to facilitate audit as the City may provide. All records shall be available to the City or its authorized representatives for review and audit during normal business hours.

## 7.0 ASSIGNMENT/SUBCONTRACTING

The Contractor agrees that he will not sell, assign or transfer this Contract or any part thereof or interest therein without the prior written consent of the City.

## 8.0 REMEDY FOR DEFAULT

If the Contractor, in the sole judgment of the City, shall violate or fail properly to comply with or perform in any material respect any condition, provision, or warranty hereof, the City shall have the right by prior written notice to the Contractor to have the services called for hereby otherwise performed, and/or to terminate this contract without prejudice to any other rights or remedies of the City under this contract. The Contractor shall pay any excess in the City's cost to so procure the services and any related goods, supplies, materials or equipment. In addition, and without limiting any other remedies available to the City, the Contractor shall be liable for all losses, costs and expenses incurred by the City which result from the Contractor's noncompliance.

## 9.0 SUSPENSION OR TERMINATION

9.1 The City shall have the right, upon seven (7) days written notice to the Contractor so stating, to terminate, suspend, or postpone this contract in whole or in part for any reason deemed by the City to be in the public interest. Any such termination, suspension, or postponement shall not give rise to any cause of action for damages against the City. In the event that the City postpones or suspends the Services, the Contractor's time for performance of the Services shall be extended for a period equal to the period of such postponement or suspension. In the event of termination, suspension or postponement, the City shall pay: (a) for services and any related goods, supplies, materials and equipment furnished up to the time of termination, suspension, or postponement at the contract price upon delivery; (b) for work in process in the amount of the Contractor's cost, determined in accordance with ordinary accepted accounting practices, up to the time of termination, suspension, or postponement; and (c) for raw materials purchased by the Contractor as of the date of termination, suspension, or postponement and which are noncancelable at the Contractor's actual cost plus reasonable handling charges, but only to the extent that such raw materials were purchased in reliance upon this contract and are useful solely with respect to this contract.

9.2 Upon receipt of a notice of termination, suspension, or postponement the Contractor shall immediately cease all work hereunder and cancel all orders placed with respect to this contract. The Contractor's failure to so cancel shall relieve the City of the obligations of paragraph 10.1 above.

9.3 The City may postpone, suspend or terminate the Services immediately, by notice, hand delivery or certified mail, if the Contractor violates any of the provisions of this Contract, or fails to perform or observe any of the terms, covenants or conditions of this Contract, or abandons in whole or in part its Services, or becomes unable to perform its Services.

9.4 In the event of termination of this Contract, the Contractor shall promptly deliver to the City all documents, work papers, calculations, computer programs, data, drawings, plans, and other tangible work product, or materials pertaining to the Services performed under this Contract to the time of termination.

#### 10.0 NOTICE

Any action, notice or request required to be taken, given or made by City or the Contractor hereunder may be taken, given or made only by those persons identified for that purpose on the Contract Form. All notices required to be given hereunder shall be deemed properly given if personally delivered, or if mailed by registered or certified mail, postage prepaid addressed to the address and officer identified on the Contract Form.

#### 11.0 PROTECTION OF PROPERTY

The Contractor shall take all reasonable precautions to prevent damage to property, visible and concealed, and shall restore to substantially the same condition existing prior to the Contractor's entry any disturbance or damage to property caused by the Contractor or any person acting under its control.

#### 12.0 INSURANCE REQUIREMENTS

12.1 The Contractor shall provide insurance coverage as listed below. This insurance shall be provided at the Contractor's expense and shall be in full force and effect during the full term of this Contract.

##### WORKER'S COMPENSATION

Worker's Compensation:	Per M.G.L. c.149, §34 and c.152 as amended.
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##### PUBLIC LIABILITY

Personal Injury	\$500,000 each occurrence
	\$1,000,000 aggregate
Property Damage	\$500,000 each occurrence
	\$1,000,000 aggregate

##### VEHICLE LIABILITY

Personal Injury	\$500,000 each person
	\$1,000,000 aggregate
Property Damage	\$300,000 each occurrence
	\$500,000 aggregate

12.2 The City shall be named as additional insureds on the Contractor's Liability Policies.

12.3 The Contractor shall not commence the work until proof of compliance with this Section 12.0 has been furnished to the City by submitting one copy of a properly endorsed insurance certificate issued by a company authorized to write insurance in the Commonwealth. This certificate shall indicate that the contractual liability coverage is in force.

12.4 The Contractor shall file the original and one certified copy of all policies with the City within fifteen (15) days after contract award. If the City is damaged by the Contractor's failure to maintain such insurance and to so notify the City, then the Contractor shall be responsible for all reasonable costs attributable thereto.

12.5 Cancellation of any insurance required by this contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given by the party proposing cancellation to the other party and City at least thirty days prior to the effective date thereof, which shall be expressed in said notice.

### 13.0 CONFLICT OF INTEREST

No member, agent or employee of the City shall , during his/her tenure or one year thereafter directly or indirectly, have any interest in any property to be included in, or any contract for property, materials or services to be furnished or used in connection with, this contract or the proceeds thereof.

### 14.0 COMPLIANCE WITH LAWS

All work to be performed and wages paid under this specification shall be in accordance with all applicable laws, state or federal, and all applicable ordinances, codes, rules, and regulations of the City of Newton, or any public board or office having any jurisdiction, regulation or control over any work to be done hereunder, including minimum wage rates. In particular, without limitation, the Contractor agrees to comply with all regulations pertaining to approvals for federal and state grants, and with all federal and state environmental laws and regulations. The Contractor agrees to assist in making any submissions to federal or state agencies as may be required in order to meet the requirements in this paragraph.

### 15.0 INDEMNIFICATION

The Contractor agrees to indemnify and save the City harmless from and against any and all costs, losses, expenses, liabilities, damages or claims for damages, including reasonable attorney's fees and expenses, on account of any injury or damage to buildings, improvements, or property of the City or on account of any injury (including death) or damage to any person, persons, firm, corporation or association, or on account of any infringement or claim of infringement of patents, arising out of or resulting from the deliveries provided for or performed under this contract or from any act, omission or negligence of the contractor, his agents, employees, or assigns. The foregoing provisions shall not be deemed to be released, waived or modified in any respect by reason of any surety or insurance provided by the contractor under contract.

### 16.0 FORCE MAJEURE

The City may not hold the Contractor liable for any loss, expense or damage incurred by the City on account of failure of the Contractor to deliver services as specified herein, if that failure is caused by state of war, acts of enemies, expropriation or confiscation of facilities used by the Contractor, or compliance with any law, order, or regulation of any federal, state or municipal governmental authority, if the Contractor shall show that such compliance would impair this ability to perform a material provision of this contract, the Contractor having given the City reasonable notice of such cause.

### 17.0 DISPUTES

All claims, disputes and other matters in question between the City and the Contractor arising out of or relating to this Contract or the breach of it, shall be submitted for resolution to a court of competent jurisdiction in Massachusetts, unless otherwise agreed by the parties. No such action shall be brought, however, until the completion of all Services under this Contract or the earlier termination of this Contract as provided herein, the parties agreeing to negotiate any claims, disputes or other matters in question during the term of this Contract before resorting to litigation. As to all acts or failures to act by either party to this Contract, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events when the other party becomes aware or should have been aware of such acts or failure to act.

### 18.0 GOVERNING LAW

This contract shall be governed by and construed in accordance with Massachusetts Law.

### 19.0 LIABILITY

The Contractor is retained solely for the purpose of and to the extent set forth in this Contract. The Contractor's relationship to the City for the purpose of services to be performed under this Contract shall be that of an independent contractor. The Contractor shall have no capacity or authority to involve the City in any contract or to incur any liability on behalf of the City. In no event shall the City be held liable as an employer or otherwise for any personal injury to or death of the Contractor's principals, employees, agents and/or representatives occasioned by or resulting from the Contractor's performance under this Contract.

### 20.0 LIENS

The Contractor shall cause to be removed from the property of the City any liens or other claims asserted by any person or entity claiming through or under the Contractor and arising out of Services performed under this Contract by such third party.

## 21.0 SEVERABILITY

In the event that any portion of this Contract is held illegal or unenforceable by a court of competent jurisdiction, the parties agree that such invalidity shall not affect the validity of the remaining portions of this Contract and Contractor and the City agree to substitute for the invalid provision a valid provision which most closely approximates the economics and intent of the invalid provision.

END OF SECTION

## ELLIOT STREET PUMP STATION

### SEWAGE GRINDER

#### PART 1 - GENERAL

##### 1.01 WORK INCLUDED:

This section of the specification covers the replacement of the abandoned JWC Channel Monster in the Elliot Street Pump Station. The Contractor shall furnish, install and test the in channel sewage grinder with the drive and appurtenances, complete as herein specified. The unit shall be connected to the existing controller.

##### 1.02 SYSTEM DESCRIPTION:

- A. The sewage grinding equipment shall consist of motor driven cutters with gear reducers, rotating drum screens, seals, couplings, frames, electrical controls, and all associated equipment and accessories required to make a complete system.
- B. The sewage grinders shall be suitable for mounting in the manufacturer provided frames positioned within the channel.
- C. This specification directs special attention to certain features, but does not purport to cover all details of the design, manufacture or installation of the sewage grinders. Final responsibility for supplying and installing sewage grinders which function as specified herein rests with the Contractor and his suppliers.

##### 1.03 QUALITY ASSURANCE:

###### A. ALL EQUIPMENT SHALL CONFORM TO THE FOLLOWING CRITERIA:

- 1. Equipment shall be the manufacturer's standard products presently in commercial production.
- 2. All equipment specified under this Section shall be furnished by a single supplier and shall be products of manufacturers regularly engaged in the production of said equipment. The supplier shall have the sole responsibility for proper functioning of the sewage grinders.
- 3. Any reference to a specific manufacturer or model number is for the purpose of establishing a quality or parameter for specification writing and is not to be considered proprietary. In all cases any source or device that has the quality and operating capabilities specified may be acceptable.
- 4. Conform to requirements for materials, installation and equipment approvals of state, local Underwriter's Laboratories, Inc., or other applicable codes, whether or not called for on the drawings or in the specifications.
- 5. Workmanship shall be first class in all respects.
- 6. Base the use of unspecified materials on their continuous and successful employment under similar conditions, as called for in this Section.

###### B. MANUFACTURER'S QUALIFICATIONS:

###### 1. Quality Assurance System

Manufacturer shall have Quality Assurance System in place which complies with NQA-1, ISO 9001:2000, ANSI and MIL-Q-9858A. Upon request from the Engineer, the manufacturer shall submit to an audit to verify compliance with the referenced standards.

- 2. Consideration shall be given only to the equipment of well-established and reliable manufacturers who are regularly engaged in such work and thoroughly experienced in the design and manufacture of said equipment. The manufacturer shall certify a minimum of one thousand (1,000) successful operating installations and a minimum of twenty five (25) years of experience in the United States using similar size equipment as specified herein as evidence of meeting the experience requirement.

- 3. The system described herein and shown on the drawings establishes a standard of required type, function and quality to

be met by any proposed substitute or "or-equal" systems. All "or-equal" systems shall meet the exact system configuration and operational function as shown on the drawings and specified herein. No "or-equal" system shall be considered by the Engineer unless written request for approval has been submitted for and approved by the Engineer in writing. The burden of proof of merit for the proposed "or-equal" systems is upon the Contractor and the proposed equipment manufacturer. The Engineer's decision of approval or disapproval of a proposed item shall be final. If the Engineer approves any "or-equal" item, the Contractor shall indemnify, hold harmless and defend both the Owner and the Engineer from any claims associated with the "or-equal" systems. Approval of "or-equal" systems does not relieve the Contractor of any requirements specified herein, called for by the Engineer or shown on the drawings.

4. All spare parts shall be available for same day shipment and next day delivery. The manufacturer shall maintain a fully equipped shop facility to perform all operations including welding, fabrication, assembly and testing. All materials shall be designed to withstand the stresses encountered in fabrication, erection and operation. All equipment shall be of corrosion resistant materials or shall be suitably protected by the supplier with corrosion resistant industrial coatings approved by the Engineer.
5. In channel sewage grinder shall be as manufactured by JWC Environmental, Costa Mesa, CA.

C. FACTORY TESTS:

The sewage grinder shall be given an operational test consisting of running each unit dry for a period of not less than 30 minutes while feeding it solid materials frequently encountered in sewage flow.

- D. Field acceptance tests shall be performed as specified in PART 3 - EXECUTION.

1.04 REFERENCES:

- A. The latest editions of the following standards form a part of this specification:

American Society for Testing and Materials (ASTM)

ASTM A48 Specifications for Gray-Iron Castings.

ASTM A536 Ductile Iron Castings

National Electric Code (NEC)

NEC National Electric Code.

National Electric Manufacturer's Association (NEMA)

NEMA Standard as Specified.

1.05 SUBMITTALS: SUBMIT THE FOLLOWING:

- A. Prior to fabrication, the Contractor shall submit to the Owner for review, six copies of each of the following: complete shop drawings, including manufacturer's data sheets, showing illustrated cuts of the item(s) with scale details, sizes, dimensions, capacities, performance characteristics, wiring diagrams, controls, and other pertinent information, complete operating and maintenance instructions, and parts lists. A secondary submittal shall include the actual performance of the units under factory testing.
- B. A complete, easily readable functional description of the proposed equipment.
- C. In addition, the submittals shall also include the following:
  1. General arrangement drawings.
  2. Certified shop and erection drawings showing all important details of construction, dimensions, moment, rotational and torsion loads, anchor bolt locations, and field connections.
  3. Descriptive literature, bulletins, and catalogs of the equipment.
  4. Detailed data on the grinder units, motors, control panels and appurtenances
  5. Certified performance test reports.
  6. Long term storage, installation, operation, and start-up procedures including lubrication requirements.
  7. Total weight of the equipment including the weight of the single largest item.

8. O&M manuals as described herein.
9. Complete list of deviations from the drawings and specifications.
10. Letter from manufacturer, certifying that proposed equipment is approved for use as shown on the drawings and specified herein.
11. A certified installation list and start-up date for the manufacturers' equipment currently operating in United States installations.

- D. In the event that it is impossible to conform to certain details of the specifications due to different manufacturing techniques, describe completely all nonconforming aspects.
- E. Upon completion of the installation of each unit, the results of the field and acceptance tests as specified under this section of the specification shall be submitted to the Engineer.
- F. Furnish written certification from the manufacturer's representative of the proper installation and operation of each component.

1.06 OPERATIONS AND MAINTENANCE MANUALS (four sets):

- A. The manufacturer shall be responsible for supplying written instructions, which shall be sufficiently comprehensive to enable the operator to operate and maintain the equipment and all associated equipment supplied by the manufacturer. Said instructions shall assume that the operator is familiar with equipment, motors, piping, and valves, but that he has not previously operated and/or maintained the exact equipment supplied.
- B. These instructions shall be prepared as a systems manual applicable solely to the equipment supplied by the manufacturer to these specifications, and shall include those devices and equipment supplied by him. However, items of equipment for which the manufacturer has made mounting or other provisions, but which he has not supplied, may be excluded from these instructions.
- C. Operation and maintenance instructions shall be specific to the equipment supplied in accordance with these specifications. Instruction manuals applicable to many different configurations and pumps, and which require the operator to selectively read portions of the instructions shall not be acceptable.
- D. Submit operations and maintenance manuals for the equipment, within 30 days of shop drawing approval.
- E. Manuals shall include but are not limited to the following:
  1. Complete operations and maintenance information for the specific equipment.
  2. Name, address, and telephone number of the nearest competent service representative who can furnish parts and technical service.
  3. Complete parts list including the manufacturer's reference and ordering numbers, including any required maintenance items or tools.
  4. Descriptive literature, including illustrations, covering the operational features of the equipment, specific for the particular installation, with all inapplicable information omitted or marked out.
  5. Unit weight, moment, rotational and torsion loads.
  6. Operating, maintenance and trouble shooting information.
  7. Complete connection, interconnecting and assembly diagrams.
  8. Approved Shop Drawings.
  9. Recommended Spare Parts List.
- F. Manuals shall also include the following:
  1. Instructions for all adjustments, which must be performed at initial startup of the equipment, adjustments which must be performed after the replacement of control system components, and adjustments which must be performed in the course of preventive maintenance as specified by the manufacturer.

2. Instructions for the adjustment, calibration, and testing of selected electronic components or assemblies, normally considered replaceable by the manufacturer, whose performance is not ascertainable by visual inspection.
  3. Service instructions for major components not manufactured by the manufacturer but which are supplied by him in accordance with these specifications. Incorporation of literature produced by the actual component manufacturer will be acceptable.
  4. Electrical schematic diagram of the equipment packages as supplied, prepared in accordance with all applicable standards. Schematics shall show, to the extent of authorized repair, motor branch, control, and alarm system circuits, and interconnections among these circuits. Wire numbers shall be shown on the schematic. Schematic diagrams for electronic equipment, the detail parts of which are normally repairable by the operator, need not be included, and shall not be substituted for an overall schematic diagram. Partial schematics block diagrams, and simplified schematics shall not be provided in lieu of an overall schematic diagram.
- G. The manuals shall be reviewed by the Owner for completeness; those that are deemed inadequate shall be returned for correction.
- H. Operation and maintenance instructions which are limited to a collection of component manufacturer literature without overall package instructions will not be acceptable.

1.07 DELIVERY, STORAGE, AND HANDLING:

- A. The equipment, materials and spare parts shall be shipped complete and ready for installation except where partial disassembly is required by transportation regulations, is recommended by the manufacturer, or for protection of components.
- B. All necessary location drawings and templates required to install the equipment in concrete, masonry, etc., shall be furnished and delivered to the site by the manufacturer of the equipment furnished under this Section, for installation under other Sections of the specifications. Delivery of these items shall be as required by the overall construction schedule.
- C. Deliver to Site. The Contractor shall deliver and unload the equipment and properly store and maintain the equipment as required until installation.
- D. Units temporarily stored shall have covered and taped ends for protection. Equipment damaged or bent during storage, shipment or unloading shall be replaced at no additional cost to the Owner.
- E. The manufacturer shall properly store and support equipment. Protect all exposed surfaces. Keep records of the storage parameters and the dates that storage procedures were performed.
- F. Store motors in buildings or trailers, which have a concrete or wooden floor, a roof and fully closed walls on all sides. Protect the equipment from being contaminated by dust, dirt, vibration, ultra violet radiation and moisture.
- G. Provide suitable temporary leads for motor space heaters, if space heaters are deemed necessary.
- H. Spare parts shall be packed in containers bearing labels clearly designating contents and pieces of equipment for which intended. The containers shall be suitable for long-term storage by the Owner. Spare parts shall be delivered to the site at the same time as the basic equipment and turned over to the Owner after completion of work.
- I. Fabricated assemblies shall be shipped in the largest sections permitted by carrier regulations and shall be properly match-marked for ease of field erection.
- J. The manufacturer shall recommend and confirm all storage arrangements.

1.08 WARRANTY STATEMENT:

The manufacturer's warranties from defects shall contain a provision that the manufacturer shall repair or replace any defects, to the satisfaction of and at no additional cost to the Owner, for a period of twelve (12) months, from the date of project Substantial Completion. The warranty information shall be provided in writing from the manufacturer in the submittal and shall be revised upon Substantial Completion to incorporate the date of the project Substantial Completion.

END OF SECTION

## ELLIOT STREET PUMP STATION

### SEWAGE GRINDER

#### PART 2 - PRODUCTS

##### 2.01 EQUIPMENT SCHEDULE:

In channel Type Grinder Schedule (Existing Unit)

Number of units	1	Channel Width, inches	43.5
Existing Unit	JWC Channel Monster	Channel Depth, inches	47.75
Serial No.	G004508-1	Model No.	CDD3216XDM-2.0

A letter from the manufacturer that, based on a system wide calculation, there shall be no hydraulic issues with the grinder based on the installation configuration and flows shown above. If the manufacturer's calculations indicate that there will be hydraulic issues the manufacturer shall notify the Engineer and the Contractor immediately and shall make recommend modifications such that there are no hydraulic issues. The modifications shall be at no additional cost to the Owner.

##### 2.02 MATERIALS:

- A. Iron castings, shapes and bars shall be ASTM A48, of suitable class for the intended purpose.
- B. Other materials shall be to applicable ASTM specifications unless otherwise specified.

##### 2.03 GRINDERS:

- A. The sewage grinder shall be designed for in-channel installation within a channel-mounting frame, capable of holding the unit in position without bolts. The grinders shall be capable of operating continuously; processing wet or dry, and shall not require an external water source. The cutting action shall be achieved by counter-rotating cutters driven by two parallel shafts moving at different speeds. Dual single shaft horizontally rotating screens shall divert waste stream solids into the cutter assembly.
- B. The sewage grinder shall be constructed of compatible corrosion resistant materials designed to resist corrosion due to cavitation or galvanic action.

##### C. SHAFTS:

- 1. Shafts shall be fabricated from 2-inch AISI 4140 Heat-Treated Hexagonal Steel with a minimum tensile strength rating of 149,000 psi.
- 2. The two shafts shall counter-rotate and equipped with spacers and intermeshing cutters.

##### D. CUTTERS AND SPACERS:

- 1. Cutters and spacers shall be cast from AISI 8620 Heat Treated Alloy Steel, surface ground for uniformity and through-hardened to 60-65 Rockwell "C."
- 2. The inside configuration of the cutters and spacers shall be hexagonal, designed to fit the shafts with a total clearance not to exceed 0.025 inches across the flats to assure positive drive and to increase the compressive strength of the spacers.

3. Cutters shall be placed on the shafts in a helical formation and in a 1:1 ratio to the spacers.
4. The cutters shall be the 7-tooth design type. To maintain particle size, the height of the tooth shall not exceed 1/2 inch above the root diameter, and shall exert a minimum force of 450 lbs. per hp continuously and 1430 lbs. per hp at momentary load peaks at the tooth tip. Cutter root diameter overlap shall not be less than 1/16 inch or greater than 1/4 inch, to maintain the best possible cutting efficiency while incurring the least amount of frictional losses.

**E. SCREEN DUAL DRUM ASSEMBLY:**

1. The unit shall contain dual single shaft horizontally rotating screens.
2. The screens shall be 316 stainless steel coil wound configurations to divert the solid waste stream to the cutter stack.

**F. BEARINGS AND SEALS:**

1. Radial and axial shaft loads shall be borne by four sealed oversized Conrad-type ball bearings, which shall be rated for a minimum basic dynamic load of 7,050 lbs. by the bearing manufacturer. The bearings shall be protected by a combination of a tortuous path device and end face mechanical seals. Face materials shall be a minimum of tungsten carbide to tungsten carbide.
2. Seals shall require no external water source, and shall be rated a minimum of 90 psi by the equipment manufacturer.
3. The bearings and seals shall be housed in replaceable wear sleeves that support and align the bearings and seals.

**G. REDUCER AND COUPLINGS:**

1. The speed reducer shall be the planetary type, grease filled, with a service factor of 1.9 and a "heavy shock" load classification. The reduction ratio shall be 29:1.
2. The high speed grinder, reducer and motor shafts shall be in a direct line and have 2 and 3 piece couplings.

**H. MOTOR:**

Sewage grinder motor Model No. CDD3216XDS-2.0 shall be submersible and explosion proof, UL listed for a Class 1 Group "D" hazardous environment, premium energy efficient type, 1725 RPM, 60 Hz, 3-phase, 460V, + 10%, TEXP, 1.15 service factor.

**I. NAMEPLATES:**

Each unit of equipment shall be identified with a corrosion resistant nameplate, securely affixed in a conspicuous place. Nameplate information shall include equipment model number, serial number, manufacturer's name and location.

**J. HOUSING AND SIDE RAILS:**

1. Housing of the sewage grinders shall be cast of ASTM A536 Ductile Iron.
2. Side rails shall be cast of ASTM A536 Ductile Iron and shall bolt laterally to the end housings. Baffle drum side rails shall be installed on each side of the unit. The side rails shall be affixed to the grinder so as to maintain a clearance not to exceed 5/16 inches between the major diameter of the cutter and the concave arc of the side rail, thus assuring that particles larger than that clearance are directed toward the cutters.
3. End housing shall be high strength ductile iron and designed with a bottom bushing deflector to protect the bushings while guiding particles directly into the cutting chamber. The bottom end housing shall have a height of 4 inches or less to minimize upstream head. The top end housing shall contain the stack tightening nuts. The nuts shall be easily accessible so that the cutter stack can be tightened without removing the unit from the channel.

**2.04 PAINTING AND SURFACE PREPARATION:**

- A. The components of the grinders and motors shall be thoroughly cleaned to remove mill scale, dirt, rust, grease, and other foreign matter. Motors, casings, receivers and other items customarily finished at the shop shall be given coats of paint filler and enamel or other approved treatment customary with the manufacturer.

- B. Ferrous surfaces obviously not to be painted shall be given a shop coat of grease or other suitable rust-resistant coating.
  - C. Grinder units and appurtenances shall receive factory finish paint in accordance with the manufacturer's standard paint for wastewater applications. Paint shall be suitable for submergence in typical municipal wastewater with temperatures as low as 4 degrees Celsius. Submit descriptive information and catalog cuts of the surface preparation and paint with the shop drawings. Frame mounting systems and appurtenances shall receive surface preparation and shop prime and finish paint per the manufacturer's recommendations. Finish paint to be applied in the field shall be provided by the manufacturer and applied by the Contractor.
  - D. All paint shall be as manufactured by Tnemec and shall be in accordance with all State and Federal regulations which govern paint content (VOC's, etc.).
  - E. Stainless steel surfaces shall not be painted.
- 2.05 ELECTRICAL & INSTRUMENTATION CONTROL REQUIREMENTS:
- A. The new grinder unit shall be connected to the existing control panel.

END OF SECTION

## ELLIOT STREET PUMP STATION

### SEWAGE GRINDER

#### PART 3 - EXECUTION

##### 3.01 INSTALLATION:

- A. Installation of the sewage grinders and related appurtenances shall be performed in accordance with all written instructions furnished by the manufacturer.
- B. After installation, the Contractor shall clean all surfaces damaged in shipment or installation and shall touch up in the field with the same materials as the original coatings.

##### 3.02 MANUFACTURER'S REPRESENTATIVE SERVICES:

- A. Manufacturer shall provide the necessary on-site services for each grinder unit that is provided hereunder to include:
  - 1. Observation of installation
  - 2. Certification of proper installation
  - 3. Alignment and adjustment as necessary
  - 4. Startup and testing
  - 5. Certification for use and start of warranty

- B. The services of a factory-trained manufacturer's representative shall be provided as specified herein.

- C. Services to be provided:

The service representative shall be responsible for complete component inspection on site after delivery and shall assist in the correct assembly of the components for a minimum period of one (1) eight-hour day including services outlined below:

- 1. Inspection and check out of erected equipment
- 2. Start-up services and supervision
- 3. Complete instruction of the operating personnel

- D. The minimum period of time herein specified does not relieve the manufacturer from providing sufficient time to satisfactorily complete the required service functions.
- E. The manufacturer's representative shall certify in writing that each grinder unit has been properly installed.
- F. The Owner reserves the right to videotape the instruction of the operating personnel for future use in training.
- G. The grinder unit shall be assembled and installed in strict accordance with the manufacturer's recommendations and as approved by the Owner.

##### 3.02 FIELD ACCEPTANCE TESTS:

- A. After installation of the equipment and after completion of the services of the manufacturer's representative, the Contractor shall operate the unit to demonstrate its ability to grind without excessive vibration, motor overloading, or overheating. The sewage grinder shall be operated for a sufficient period of time to permit thorough observation of all components.
- B. Notify Owner in writing at least three days in advance of the tests.
- C. All defects or defective equipment shall be corrected or replaced promptly at the Contractor's expense.
- D. All final adjustments necessary to place the equipment in satisfactory working order shall be made prior to the tests.
- E. If sufficient sewage is not available for the test, the Contractor shall provide water for testing. All labor and materials necessary for the test shall be furnished by the Contractor.

3.03 SPARE PARTS:

- A. Provide a list of all spare and replacement parts and locations where they are available and can be purchased. The Contractor shall furnish and deliver to the Owner at the site of the work the following spare parts, all of which shall be identical to and interchangeable with similar parts installed in the work.
  - a. Three (3) cutters and three (3) spacers per unit.
  - b. One complete set of gaskets per unit.
  - c. Complete set of spare fuses
  - d. Complete set of spare bulbs/LEDs
- B. Grinder spare parts shall be packaged in containers suitable for long-term storage and shall bear labels clearly designating the contents and the equipment for which they are intended.
- C. The manufacturer shall also provide all other spare parts as recommend and as itemized in the operations and maintenance manual, for each unit installed and ancillary system component installed.

END OF SECTION